We Claim:

1. A method for a shift control of a power shift transmission, the method which comprises:

providing slip-regulated wet clutches operating respectively as an incoming clutch unit and an outgoing clutch unit;

closing the incoming clutch unit assigned to a new gear and opening the outgoing clutch unit assigned to an old gear such that the closing and the opening overlap in time;

closing the incoming clutch unit substantially up to a working pressure corresponding to a clutch capacity of the outgoing clutch unit after performing a filling operation for providing a filling pressure for the incoming clutch unit, the filling operation being concluded by a filling end; and

performing, in case of a manually triggered power shift, the filling operation for the incoming clutch unit with an increased filling pressure corresponding to an order of magnitude of the clutch capacity of the outgoing clutch unit, ascertaining the filling end, and after the filling end is identified, opening the outgoing clutch unit and adapting a clutch capacity of the incoming clutch unit such that the opening of the outgoing clutch unit and the adapting of the clutch capacity overlap in time.

2. The method according to claim 1, which comprises setting the filling pressure of the incoming clutch unit at substantially between 80% and 90% of a pressure level corresponding to the clutch capacity of the outgoing clutch unit.

3. The method according to claim 1, which comprises setting the filling pressure of the incoming clutch unit at substantially 100% of a pressure level corresponding to the clutch capacity of the outgoing clutch unit.

4. The method according to claim 1, which comprises accelerating the step of opening the outgoing clutch unit by switching the outgoing clutch unit pressureless via a throttle that is enlarged as compared with a normal operation.

5. The method according to claim 1, which comprises ascertaining the filling end of the incoming clutch unit by sensing a working pressure in a pressure space of the incoming clutch unit.

6. The method according to claim 1, which comprises ascertaining the filling end of the incoming clutch unit by

determining a pressure gradient of a working pressure in a pressure space of the incoming clutch unit.

7. The method according to claim 5, which comprises interpreting a reaching and overshooting of a given pressure limit value in the incoming clutch unit as the filling end.

8. The method according to claim 6, which comprises interpreting an overshooting or undershooting of a given pressure gradient value in the incoming clutch unit as the filling end.

9. The method according to claim 1, which comprises ascertaining the filling end of the incoming clutch unit by sensing a commencing twisting of a power shift transmission.

10. The method according to claim 1, which comprises:

sensing a vehicle acceleration or vehicle deceleration; and

interpreting a reaching and undershooting of a given acceleration limit value or given deceleration limit value as the filling end.

11. The method according to claim 1, which comprises:

sensing a working pressure in a pressure space of the outgoing clutch unit; and

interpreting a reaching and undershooting of a given pressure limit value in the outgoing clutch unit as the filling end.

12. The method according to claim 1, which comprises:

sensing a transmission-side rotational speed and a wheel-side rotational speed of a driven-side drive train; and

interpreting a reaching and overshooting of a given positive difference between the wheel-side rotational speed and the transmission-side rotational speed as the filling end.

13. The method according to claim 1, which comprises:

performing at least two ascertaining steps selected from the group consisting of ascertaining the filling end of the incoming clutch unit by sensing a working pressure in a pressure space of the incoming clutch unit, ascertaining the filling end of the incoming clutch unit by determining a pressure gradient of a working pressure in a pressure space of the incoming clutch unit, ascertaining the filling end of the incoming clutch unit by interpreting a reaching and overshooting of a given pressure limit value in the incoming

clutch unit, ascertaining the filling end of the incoming clutch unit by interpreting an overshooting or undershooting of a given pressure gradient value in the incoming clutch unit, ascertaining the filling end of the incoming clutch unit by sensing a commencing twisting of a power shift transmission, ascertaining the filling end of the incoming clutch unit by sensing a vehicle acceleration or vehicle deceleration and interpreting a reaching and undershooting of a given acceleration limit value or given deceleration limit value, ascertaining the filling end of the incoming clutch unit by sensing a working pressure in a pressure space of the outgoing clutch unit and interpreting a reaching and undershooting of a given pressure limit value in the outgoing clutch unit, and ascertaining the filling end of the incoming clutch unit by sensing a transmission-side rotational speed and a wheel-side rotational speed of a driven-side drive train and interpreting a reaching and overshooting of a given positive difference between the wheel-side rotational speed and the transmission-side rotational speed;

evaluating respective results of the at least two ascertaining steps and deriving respective result values from the respective results of the at least two ascertaining steps;

forming an evaluation sum by adding up the respective result values; and

interpreting a reaching and overshooting of a given sum limit value by the evaluation sum as the filling end.

14. The method according to claim 1, which comprises performing the filling operation with the increased filling pressure in case of a manually triggered traction upshift in a motor vehicle.

15. The method according to claim 1, which comprises performing the filling operation with the increased filling pressure in case of a manually triggered overrun downshift in a motor vehicle.